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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,506	03/18/2005	Masanori Ogawa	2710/74093	4351
Donald S Dowe	7590 04/03/2007 den	EXAMINER		
Cooper & Dunham			BALDWIN, GORDON	
1185 Avenue of the Americas New York, NY 10036			ART UNIT	PAPER NUMBER
,,,,,,			1775	
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SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		04/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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	Application No.	Applicant(s)				
	10/528,506	OGAWA ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Gordon R. Baldwin	1775				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period value or Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused, in any and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 18 M	<u>arch 2005</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	This action is FINAL. 2b) This action is non-final.					
•	<del>, _</del> , , , , , , , , , , , , , , , , , ,					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-12</u> is/are rejected.	6)⊠ Claim(s) <u>1-12</u> is/are rejected.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior	•	ed in this National Stage				
application from the International Bureau	· · · · · · · · · · · · · · · · · · ·					
* See the attached detailed Office action for a list	or the certified copies not receive	<b>2</b> 0.				
•						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date	6) Other:					

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Concerning claim 1, it is not clear from claim one what exactly the core member is made of from the selection provided. Specifically, "said core member is made of crystalline polyester, stereoregular polyethylene, a polymer alloy of engineering plastic and thermoplastic resin, or a polymer alloy" seems to indicate a Markush group, but the sentence structure leaves the exact determination of what combinations of materials the core can be made from vague and indefinite.

Additionally, the use of the terms, "rubber-like" is considered to be vague because it is not understood in what way the item is rubber-like. It could be a polymer or could have flexibility like rubber or melting points close to a rubber.

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## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanmartin (U.S. Pat. No. 4,937,125).

Consider claims 1-4, 7, 9, 11 and 12, Sanmartin teaches a panel structure with a first, second and third layers, where the first and third layers consist of glass or aramide fiber reinforced resins where the resins include epoxy, polyester, phenolic and fire-proof or phenolic vinylester resins and the resin incorporated in the third layer is a fireproof epoxy resin. The second layer is taught to be a honeycomb structure made of a thermoplastic material including polypropylene, polyethylene and their copolymers, polycarbonates, acryonitrile/butadiene/styrene polymers (considered to include a styrenic elastomer), polysulfones, polyethersulfones and liquid crystal polymers, in addition to the honeycomb core being made of polypropylene. (Col. 3 lines 35-55)

Consider claim 10, Sanmartin teaches that the layers covering the honeycomb layers are to have glass fiber reinforcing them, since the applicant's specification (page 8) teaches that glass fiber can be the porous material used to cover the core,

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Sanmartin's teaching of the use of a glass fiber in the core covering layer is considered to be a porous material. (Col. 3 lines 35-45)

Claims 1, 2, 5, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Therrien (U.S. Pat. No. 4,567,076)

Consider claims 1, 2, 5, 7, Therrien teaches a structure with a honeycomb core layer (8 and Fig.) and two outer laminate layers, where the honeycomb layer may be made from any reinforced composite material such as a glass fiber (considered to be a compatibility agent (applicant's specification pg. 8)) reinforced polyimide core with the laminated layer (4 and 6) being a graphite reinforced epoxy. (Col. 7 lines 32-46)

Claims 1, 2, 5, 6, 8, and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Jordan (U.S. Pat. No. 5,791,118)

Consider claims 1, 2, 5, 6, 8 and 10-12, Jordan teaches a structure with an outer face sheet (11) and a thin inner face sheet (12) with a thin corrugated core sheet (13) (which is considered to teach a number of projections since each node is considered to project from the core structure), where the outer, inner and core sheet is made of a fiber reinforced composite material like glass or carbon fibers embedded in a polyester. (Col. 4 lines 35-47) The addition of carbon fibers to the core and the covering member of Jordan are considered to be compatibility aid agents and make the covering members porous and heat resistant.

Claims 1, 2, 3, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Moeller (U.S. Pat. No. 3,007,834)

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Consider claims 1, 2, 3, 7 and 9, Moeller teaches a honeycomb structure (in a grid structure) (20) pressed between a pair of heated plates (24 and 25), with the honeycomb being made of a thermoplastic resinous material including polystyrene, polyethylene and polypropylene. (Col. 2 lines 30-40)

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon R. Baldwin whose telephone number is (571)272-5166. The examiner can normally be reached on M-F 7:45-5:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JENNIFER MONEIL

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GRB